

INSTRUMENT, hand. (handwritten), ...
... (handwritten) ...

... (handwritten) ...
... (handwritten) ...

(MIA 14-10)

... (handwritten) ...
... (handwritten) ...

(Mining engineering)
(Mining)

AL'YANAKI, P.Ya.

The "Nivok" analytical and aperiodical balance. Izv.tekh.no.2:
83 Mr-Apr '56. (MLRA 9:7)
(Great Britain--Balance)

AL'YAHAKI, P.Ya., red.

[Instructions 69-56 for checking weights (measures of mass)]
Instruktsiia 69-56 po poverke rabochikh gir' (mer massy).
Izd. ofitsial'noe. Moskva, 1956. 27 p. (MIRA 14:5)

1. Russia (1923- U.S.S.R.) Komitet standartov, mer i iz-
meritel'nykh priborov.
(Weights and measures--Testing)

ALYANCHIKOVA, G.N.

Dew-point hygrometer. Trudy NIIGMP no.7:55-62 '59. (MIRA 13:5)

(Hygrometry)

ALYANCHIKOVA, G.N.

Equipment for testing and verifying humidity measuring instruments.
Trudy NIIGMP no.7:92-98 '59. (MIRA 13:5)
(Meteorological instruments--Testing)
(Humidity)

ALYAMA H. KAWA, V.N.

18(6) PHASE I BOOK EXPLOITATION SOV/3199

Akademiya nauk SSSR. Institut obshchey i neorganicheskoy khimii
 im. M. S. Kurakova

Analiz blagorodnykh metallov (Analysis of Noble Metals) Moscow,
 1959. 193 p. Krrata slip inserted. 2,700 copies printed.

Resp. Ed.: M. K. Fabenitsyn, USSR Academy of Sciences, Corre-
 sponding Member; and O. Ye. Zygantsev, Doctor of Chemical
 Sciences; Eds. of Publishing House: I. G. Levi, and D. M.
 Trifonov; Tech. Ed.: I. M. Guseva.

PURPOSE: This collection of articles is for scientists engaged
 in the study and analysis of the noble metals.

COVERAGE: This is a collection of articles on the analysis of the
 noble metals. It includes studies carried out by the Institute
 of General and Inorganic Chemistry in M. S. Kurakov (AN SSSR),
 as well as reports presented by scientific research organizations
 and by industrial enterprises at the Third and Fourth Conference
 on Noble Metals held in 1954 and 1957, respectively. The
 studies and reports describe new organic reagents for gravi-
 metric determination of platinum metals, and physicochemical
 methods of analysis (spectrophotometric, polarographic and
 potentiometric). Special attention is given to alloys of
 analysis for the determination of alloys as well as in refined noble
 platinum metals, silver, and gold. The book includes analytical methods, tables
 and charts. The collection also includes analytical methods of
 analysis of platinum metals containing metals of the platinum
 group. The collection will be a review of the literature on the analysis
 of platinum metals published in the last five years. No
 personalities are mentioned. References follow each chapter.

Fabenitsyn, M. K., I. V. Prokof'ev and A. Ye. Kalaidin. 15
 Use of Thiourea for the Concentration of Platinum Metals

Fabenitsyn, M. K. and M. V. Fedorynko. Use of Nitrogen
 Substituted Salts of Dithiocarbamic Acids for the Determi-
 nation of Platinum Metals 23

Fabenitsyn, M. K., M. I. Yuz'ko and L. G. Sal'skiy. 29
 Determination of Iridium, Palladium and Gold in Refined
 Silver

Fabenitsyn, M. K. and M. I. Yuz'ko. Spectrophotometric
 Determination of Rhodium With the Aid of Potassium Iodide 37

Fabenitsyn, M. K., S. I. Glazburg and L. G. Sal'skiy. 48
 Determination of Iridium in Sulfuric Acid Solutions by
 Spectrophotometric and Potentiometric Methods

Aleksandrov, V. A. Photolorimetric Method for the
 Determination of Rhodium in the Presence of Platinum 52

Kavian, S. G. and T. F. Rufe. Photolorimetric Methods
 Used in the Analysis of Platinum Metals 55

Fabenitsyn, M. K., M. A. Yezerskaya and V. D. Rabinikova. 70
 Polarographic Determination of Base Metal Alloys in
 Refined Iridium

Kurotsev, B. A. (Deceased) and V. D. Rabinikova. Determi-
 nation of Base Metals in Refined Silver Barrels. M. S. Yu.
 S. Lyalikov and V. S. Tsyvanko. Polarographic Determination
 of Certain Noble Metals by Using Platinum Electrodes 80

Levitsky, S. M., P. G. Shulakov, V. M. Alyanchikova, V. M.
 Uspenskiy and I. V. Zolotarev. Chemical and Potentiometric
 Methods for the Determination of Copper, Nickel, Iron, Zinc
 and Lead by Using a Cationite in Products Containing Platinum
 Metals 88

А. Л. Яковлев, В. А.

18(6) PHASE I BOOK EXPLOITATION SOV/3199

Академија наук СССР. Институт обшчехей i неорганического химии
и. М. С. Курнакова

Анализ благородных металлов (анализы чистых металлов) Москва,
1959. 191 p. Errata slip inserted. 2,700 copies printed.

Resp. Ed.: M. K. Fubinitern. USSR Academy of Sciences, Corre-
sponding Member; and O. Ye. Zvyagintsev, Doctor of Chemical
Sciences; Eds. of Publishing Houses: T. O. Levi, and D. N.
Trifonov; Tech. Ed.: I. M. Guseva.

PURPOSE: This collection of articles is for scientists engaged
in the study and analysis of the noble metals.

COVERAGE: This is a collection of articles on the analysis of the
noble metals. It includes studies carried out by the Institute
of General and Inorganic Chemistry and the Institute (AN SSSR)
as well as reports presented at scientific research organizations
and by individuals at the Third and Fourth Conference
on Noble Metals held in 1954 and 1957, respectively. The
studies and reports describe new organic reagents for gravi-
metric determination of platinum metals, and physicochemical
methods of analysis (spectrophotometric, polarographic and
potentiometric). Special attention is given to spectral
analysis for the determination of admixtures in alloy of
platinum metals, silver, and gold, as well as in refined noble
metals. The collection also includes analytical methods, tables
and charts for materials containing metals of the platinum
group, as well as a review of the literature on the analysis
of platinum metals published in the last five years. No
personalities are mentioned. References follow each chapter.

Fubinitern, M. K., K. A. Gladyshevskaya and L. M. Ryukhova.
Use of the Ion Exchange Method in the Analysis of Platinum
Metals. Report 2. Separation of Rhodium from Iridium 103

Anisimov, S. M., Ye. I. Mikhina and V. E. Alvanichikova.
Methods of Preparing Poor Industrial Solutions and Working
From Them Cemented Substances for the Determination of
Platinum Metals by Spectral Analysis 115

Shrepya, V. P. Spectral Method for the Determination of
Platinum, Palladium, and Tellurium in Silver-gold Alloys 128

Jankovskaya, E. I. and A. D. Gulyan. Spectral Method of
Analysis for Refined Iridium and Ruthenium 133

Kuranov, A. A., M. P. Rukhba and K. M. Sviridova. Spectral
Determination of Mixtures in Gold, Silver and Alloys 139

Kuranov, A. A. Spectral Analysis of Platinum Alloys Con-
taining Three Components 143

Adakhovskiy, A. P. and V. M. Karbolin. Determining the
Chemical Composition of Binary Alloys by the Thermoelectro-
motive Force 145

Arilov, V. B. Effect of Complexation and of the Acid-
Silver Balance in the Medium on the Potential of the
Au^{III}/Au⁰, Ag^I/Ag⁰, Au^{III}/Au^I, and Ag^I/Ag⁰ Systems 150

Arilov, V. B. and V. Y. Kosova. Chromatometric Determination
of Gold 156

Anisimov, S. M., V. M. Kurpankov and V. P. Tarabai.
Spectrometric Method for the Determination of Silver in
Silver and Lead Alloys Containing Platinum Metals 163

Yufa, T. P. and J. A. Chertsova. Dissolving Platinum
Metals and Their Alloys with the Aid of an Alternating
Current 176

Chentsova, M. A., T. P. Yufa and Y. G. Kaziani. New
Method for the Analysis of Palladium-silver Alloys 181

Rushnikov, M. S. and K. S. Zhelaz. Methods of Testing
Palladium Alloys and Their Products on a Touchstone
and by Chemical Means 184

L 27732-66 FBD/EWT(1)/EWT(m)/EEC(k)-2/T/EWP(t)/ETI/EWP(k)/EWA(h) IJP(c)
ACC NR AF6012467 WG/JD SOURCE CODE: UR/0181/66/008/004/1091/1096
AUTHOR: Alyanovskiy, V. N.; Bagayev, V. S.; Berozashvili, Yu. N.; Vul, B. M. 76B
ORG: Physics Institute im. P. N. Lebedev, AN SSSR, Moscow (Fizicheskiy institut AN SSSR)
TITLE: Polarization of the emission from gallium arsenide diodes 25
SOURCE: Fizika tverdogo tela, v. 8, no. 4, 1966, 1091-1096 27
TOPIC TAGS: gallium arsenide, semiconductor laser, pn junction, laser emission, light polarization
ABSTRACT: To ascertain the causes of the strong polarization of semiconductor lasers with p-n junctions when the generation threshold is exceeded, the authors investigated the polarization of the laser emission at injection currents above and below threshold, the influence of the orientation of the p-n junction and of the resonator mirrors on the polarization, the emission from individual lasing spots as functions of the injection current, as well as the influence of the temperature. The diodes were obtained by diffusion of Zn in GaAs doped with Te. The injection pulses were short (0.5--5 μ sec) and rectangular, with repetition frequency 40--1000 cps. The measurements were made at 77 and 4.2K. Observations were made of the integral-radiation polarization and of the spectral polarization, using polaroid film. Visual observations of the p-n junction were also made through a polarizing microscope. The experiments disclosed no connection between the character of the polarization and the

Card 1/2

L 27732-66

ACC NR: A16012467

0

orientations of the p-n junction or of the resonator mirrors relative to the crystal axes, or any temperature dependence of the phenomenon. A noticeable polarization of the integral radiation below threshold was observed, with the same orientation as above threshold. At very large currents and in individual cases several modes with different polarization directions were observed at arbitrary orientation of the junction. It is concluded from the results that the polarization direction is sensitive to inhomogeneities present in the crystal and to the presence of anisotropy of the emission or absorption of the medium, due both to the macroscopic lattice distortions and to anisotropy in the velocity distribution of the electrons. Orig. art. has: 5 figures, 8 formulas, and 1 table. [02]

SUB CODE: 20/ SUBM DATE: 16Aug65/ ORIG REF: 003/ OTH REF: 005/ ATD PRESS: 5001

Card 2/2 319

ALYANSKAYA, N.S.

Some data on seed germination of *Bergenia crassifolia* (L.) Fritsch.
Biul. Glav. bot. sada no.46:105-108 '62. (MIRA 16:5)

1. Glavnyy botanicheskiy sad AN SSSR.
(Siberia--Bergenia) (Germination)

Alyanskiy, I. S. - "A sanitary and hygienic evaluation of the water supply of the city of Astrakhan", Trudy Astrakh. gos. med. in-ta, Vol. IX, 1949, p. 243-46.

SO: U- 3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 8, 1949).

ALYANSKIY, I. S., Cand Med Sci -- (diss) "Data ^{on} the Toxicology
of Dichloroethane and ^{the} Experimental Therapy ^f on Poisonings by this
Poison." Molotov, 1957. 14 pp (Molotov Medical Inst) (KL, 48-57,
109)

ALYANSKIY, Yu. (Leningrad)

Born in fire. IUn. tekhn. 3 no.11:28-32 N '58.
(Glassware)

(MIRA 11:12)

ALYAPIN, A.G.; KOVALEV, S.I.

Efficient organization of lubricating operations in industrial enterprises; suggested by A.G. Aliapin, S.I. Kovalev. Prom. energ. 12 no.12:18 D '57. (MIRA 10:12)
(Lubrication and lubricants)

ALYAPOV, U., kandidat tekhnicheskikh nauk.

Electrolytes as accelerators in the hardening of Portland
cement. Vest.AN Kazakh,SSR 12 no.12:77-87 D '56. (MLRA 10:2)

(Electrolytes) (Cement)

KRASIL'SHCHIKOV, A.A.; KRYLOV, A.Ya.; ALYAPYSHEV, O.A.

Age of certain granitoids and gneisses in the northern part of Spitsbergen. Dokl. AN SSR 159 no.4:796-798 D '64 (MIRA 18:1)

1. Nauchno-issledovatel'skiy institut geologii Arktiki. Predstavleno akademikom D.I.Sherbakovym.

ALYAPYSHEV, Vladimir Georgiyevich; TYUMENEVA, S.T., inzh., red.;
SHILLING, V.A., izd.red.; BELOGUROVA, I.A., tekhn.red.

[Multiple-spot strain measuring of cyclodynamic processes]
Opyt mnogotochechnogo tenzometrirovaniia tsiklodinamicheskikh
protsessov. Leningrad, 1960. 16 p. (Leningradskii Dom nauchno-
tekhnicheskoi propagandy. Obmen peredovym opytom. Seriya:
Elektricheskie metody obrabotki metallov, no.7).

(MIRA 14:6)

(Strain gauges)

LIFSHITS, I. D.; KOPYL, A. N.; ALYAUVDINOV, A. O.; SHUVALOVA, L. S.;
KOMAROVA, Z. V.

Footwear made with polymer materials. Kosh. obuv. prom. 4
no.10:17-19 0 '62. (MIRA 15:10)

(Boots and shoes) (Plastics)

115 YAVLUN, N-N
CA

PROCESSES AND PROPERTIES INDEX

The blood pressure in treatment with arsphenamine. A. A. Alayudin. *Klin. Med. (U. S. S. R.)* 16, 1214-16 (1938); *Chem. Zentr.* 1939, I, 2029.—Observations were made on 122 syphilitic patients in various stages of the disease under sp. treatment with novarsenol. There was a definite decrease in blood pressure, especially following the first injection. Since at the end of treatment the fluctuations in blood pressure disappeared at the same time as the subjective symptoms of pain, the hypotension can be regarded as a symptom of the lack of tolerance of the particular organism for the salvarsan prepn. M. G. M.

117

GENERAL NOTES

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

1904 117-00174

147282 11

1904 117-00174

147282 11

1904 117-00174

147282 11

24465

ALMAVDIN, A. A. Opyt massivnoy arsenoterapii sifilisa. Trudy Slav. voyen. Gospitalya Vooruzh. SIl SSSR im. Akad. Burlenko. VYP. G. N., 1949, S. 315-21.

Bibliogr: 15 nazv.

A. and F. ...
SO: Letopis, No. 32, 1949.

ALYAVDIN, F.A.

Stratigraphy of sediments in the upper layers of the Quaternary system of the Pur-Madym watershed and the southern Tazovskiy Peninsula. Inform. sbor. VSEGEI no.6:87-93 '59, (MIRA 13:12)
(Pur-Madym region—Geology, Stratigraphic)

ALYAVDIN, N.A.; LEPETOV, V.A.

Dispersion and spread are the basic characteristics of the scattering of experimental values. Kauch. i rez. 23 no.9:32-34 S '64.

(MIRA 17:11)

1. Moskovskiy tekstil'nyy institut i Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomnosova.

1574/111, 12.
CN

28

Results of the meeting of the technical managers of the extract industry of the U. S. S. R. N. Alyavdin. *Vestnik Koshchevno-Oburnol Prom.* 1932, 81-4; *Gerber* 60, 50 1(1914). The methods and app. used in various Russian plants which prep. *tanin ext.*, as well as their resp. efficiencies, are discussed. J. W. Ivry

ASB 514 METALLURGICAL LITERATURE CLASSIFICATION

PROCESSED AND REPRODUCED IN THE
UNITED STATES GOVERNMENT

29

10-10-11, 11.

Alternative tanning extraction in diffusers. N. Alyardin.
Russkovo-Obozrenye Prom. S. S. S. R. 12, 483-4
 (1933).-- Methods used in the United States and in Rus-
 sia show that better results are obtained by extn. at
 higher temps. followed by purification of the tanning ext.
 than by lower extn. temps. A. A. Bochtlnrk

METALLURGICAL LITERATURE CLASSIFICATION

PRINCIPLES AND PROPERTIES UNIT

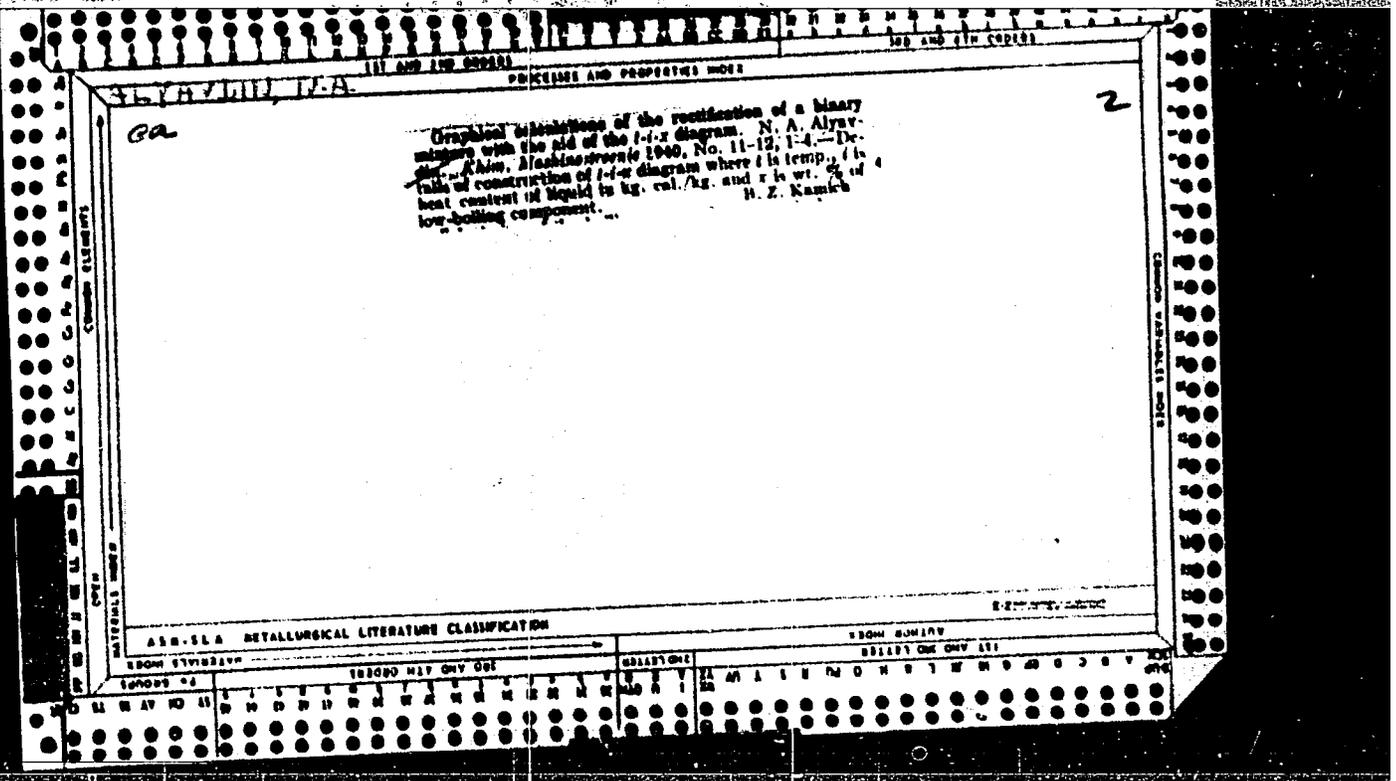
9

CA H-(M/LIII), II.

A material for preparation of metallographic specimens of powdered ores. N. Alyavdin. *Tsvetnye Metall.* 1943, No. 7, 12.—As the result of tests of various materials the author recommends ebonite as the best material for prepn. of specimens of powd. ores for microscopic examn. The ebonite is heated to 100-110°, powd. ore sprinkled on it and mixed. The specimen is then formed in a press and polished. B. N. Daulov

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

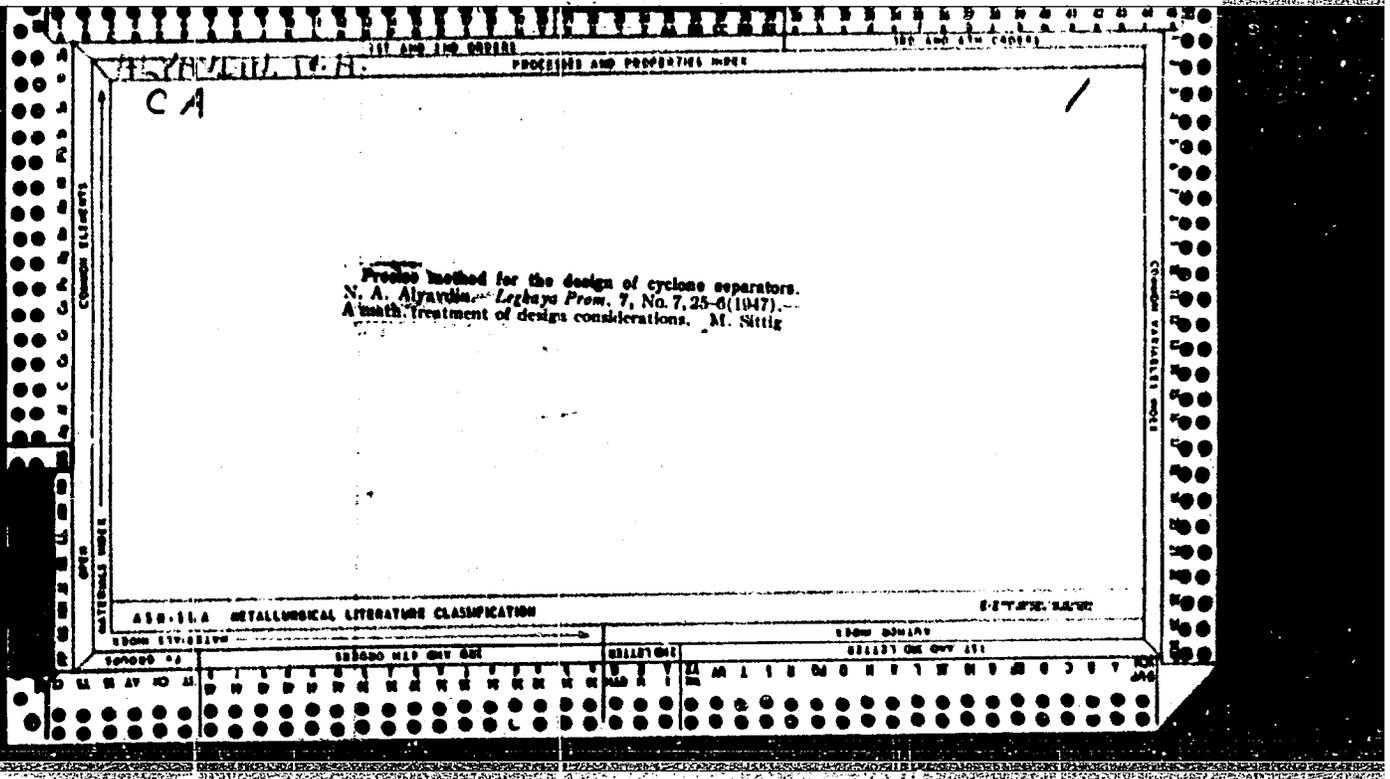


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

PREVENTING CORROSION OF Cu HEATING COLLS. N. A. Alyavdin. *Leghaya Prom.* 2, No. 5/6, 25-6(1942).—Cu heating coils in plants extg. tannin are subject to internal as well as external corrosion. The damage can be effectively minimized, as far as external corrosion is concerned, if a metal more basic than Cu, e. g., Zn, be inserted in the system so as to reverse the potential. Some practical suggestions are made. M. Hoseh

METALLURGICAL LITERATURE CLASSIFICATION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100



ALYAVDIN, N. A.

137-1957-12-23136

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 40 (USSR)

AUTHOR: Alyavdin, N. A.

TITLE: ~~The Calculation of the Asymmetrical Heating of a Plate~~ (Raschet nesimmetrichnogo progreva plastiny)

PERIODICAL: Nauchn. tr. Mosk. tekhnol. in-ta legkoy prom-sti, 1955, Vol 5, pp 263-278

ABSTRACT: Bibliographic entry

1. Plates-Heating-Mathematical analysis 2. Bibliography

Card 1/1

ALYAVDIN, N.A., professor

Improving the control of waste recovery installations. Leg.
prom. 15 no.6:18-20 Je '55. (MIRA 8:8)
(Salvage (Waste, etc.))

ALVANNIN, N.A.

AUTHOR: Alyavdin, N. A.

SOV/156-58-1-44/46

TITLE Theoretical Foundations of Psychrometry for Complex Mixtures in the Gaseous and Liquid Phases (Teoreticheskiye osnovy psikhrometrii dlya slozhnykh smesey v gazovoy i zhidkoy faze)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya tekhnologiya, 1958, Nr 1, pp. 180 - 184 (USSR)

ABSTRACT: Psychrometric determination of the vapor concentration of volatile solvents in an inert gas can serve as an important means of checking work of recovery sections of workshops of the chemical, light, and automotive industries. The high total value, and the possible recovery of large quantities (40-60%) of these solvents are a sufficient proof. Since the applied method of recovery inspection is very incomplete, and since the usual psychrometric method can be used only in the simplest cases, the author gives the foundations of psychrometry for the following complicated cases: a) in an inert gas, vapors of many components are present, among these the one with which the instrument is filled, b) the instrument is fed by a mixture of 2(or more) liquid components. In the gas both

Card 1/4

Theoretical Foundations of Psychrometry for Complex
Mixtures in the Gaseous and Liquid Phases

SOV. 156-58-1-44/46

vapors of these two components (called basic components) and of other components are present. For the simplest case: 1 main component, gaseous or liquid, the formula $d = d_M - K(t_o - t_M)$ is valid. Here d is the vapor content in the flow of inert gas (g/kg), d_M is the vapor content of the air in the bulb bag of the casing, in the state of saturation at the temperature of the wet thermometer (g/kg), K the psychrometer constant, t_o the temperature of the air flow (flow core) measured in °C, and t_M the temperature of the wet thermometer. For complicated cases nearly the same formula can be used. The difference between complicated and simple cases lies in the introduction of the coefficient A only. In order to find the latter, coefficients $A_1, A_2, A_3 \dots$ must be determined. First the case is discussed where the instrument is filled with one main component, while in the gas both vapors of the latter and of the admixtures are present. For an equilibrium, the coefficient A_2 can be calculated from the formula

Card 2/4

Theoretical Foundations of Psychrometry for Complex
Mixtures in the Gaseous and Liquid Phases

SOV/ 156.58-1-44/46

$$A_2 = \sqrt[3]{\frac{Bd}{P_M \cdot \gamma \left(d + \frac{m_k}{29} \cdot 1000 \right)}} \quad . d \text{ may be neglected. The most}$$

difficult part is to determine the activity coefficient. The author marks the values of the activity coefficients for 3 binary mixtures on the sides of the phase diagram, having computed the coefficients from the equations cited. Afterwards, activity coefficients are determined for all interior points of the triangle, i.e., for each component of the ternary mixture. Figure 1 shows a diagram of the ternary mixture of ethanol - water - ethyl acetate where some curves of activity coefficients are plotted. For the purpose of psychrometry, a study of some parts of the diagram will be sufficient. From the content data of the 3 components, $A_2 = 0,983$ is found. The psychrometric measurements have shown that the experimental and theoretical values are close to each other. The formulae cited in the paper permit a generalization to 3 and 4 main components, and for several admixtures. There are 1 figure and

Card 3/4

Theoretical Foundations of Psychrometry for Complex
Mixtures in the Gaseous and Liquid Phases

SOV/156-58-1-44/46

6 references, 1 of which is Soviet.

ASSOCIATION: Kafedra obshchey khimicheskoy tekhnologii i teplotekhniki
Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti
(Chair of General Chemical Engineering and Thermal
Engineering of the Institute of Technology for Light Industry,
Moscow)

SUBMITTED: October 15, 1957

Card 4/4

ALYAVDIN, N.A.; BARASHKOV, S.G.

Use of a rotary dryer for drying pharmaceutical chemicals. Med.
prom. 13 no.8:42-48 Ag '59. (MIRA 13:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni S. Ordzhonikidze.
(DRYING APPARATUS)

PROSHKOV, A.F.; ALYAVDIN, N.A.

Forming of packages of a complex shape. Izv.vys.ucheb.zav.; tekhn. tekst.
prom. no.5:68-73 '64. (MIRA 18:1)

1. Moskovskiy tekstil'nyy institut.

NOVORADOVSKAYA, T.S.; ALYAVIN, N.S.

Using the method of mathematical statistics for the setup of
the experiment and analysis of the equilibrium sorption of (yes.
Izv. vys. ucheb. zav.; tekhn. tekst. prom. no.6:79-84. '64.
(MIRA 18:3)

1. Moskovskiy tekstil'nyy institut.

VEL'BT, Ye.G.; ALYAVDIN, N.A.; SADOV, F.I.

Composite diagram of viscosity vs. shearing stress vs. velocity gradient for thickeners and printing inks. No. 1. zhur. 27 no.6:810-814 Nov '65. (MIRA 18:12)

1. Moskovskiy tekstil'nyy institut. Submitted February 17, 1964.

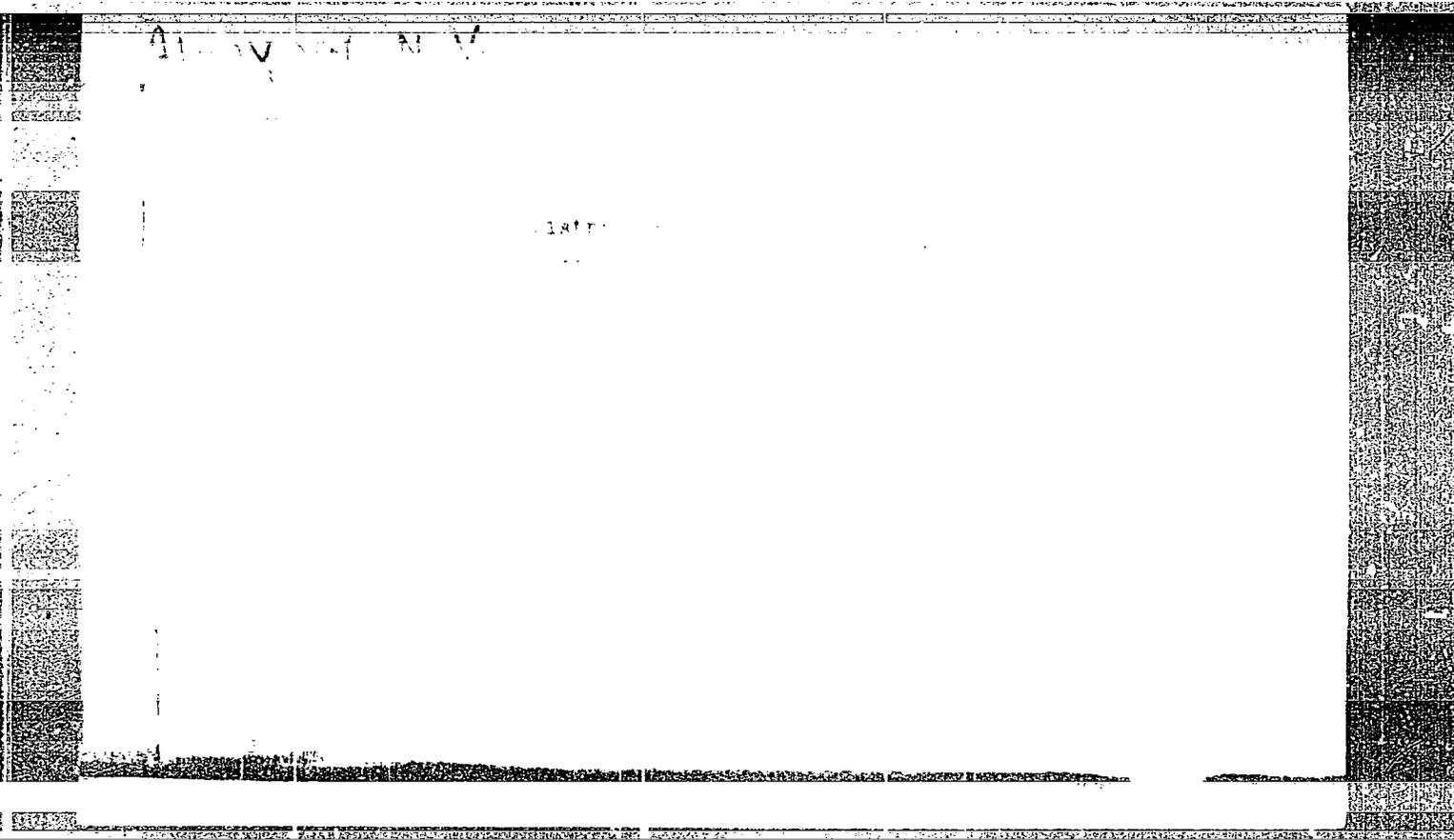
ALYAVDIN, N.A., doktor tekhn.nauk, prof.; SIDOROV, V.G., inzh.

Use of the factorial method for investigating the possibilities of perspiration absorption by silica gel in airtight rubber footwear. Izv. vys. ucheb. zav.; tekhn. leg. prom. no. 1:116-123 '60. (MIRA 14:5)

1. Moskovskiy tekhnologicheskiy institut legkoy promyshlennosti. (Boots and shoes, Rubber—Testing) (Silica)

ALYAVDINA, A. A.

"Outer Integuments of the Wheat Kernel as a Conducting System," Dokl.
AN SSSR, 25, No.6, 1939



SOV/139-58-6-6/29

AUTHOR: Alyavdin, N.V.

TITLE: Homogeneous Growth of Rochelle Salt Crystals in Conditions of Strongly Saturated Solutions and Large Supercooling of the Melt (Odnorodnyy rost kristallov segnetovcy soli v usloviyakh sil'nogo peresyshtcheniya rastvorov i bol'shogo pereokhlazhdeniya rasplava)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Fizika, 1958, Nr 6, pp 44-50 (USSR)

ABSTRACT: The paper describes experimental results on accelerated homogeneous growth of single Rochelle salt crystals, particularly on the effect of various temperature regimes and of the presence of added foreign materials in solution. The decomposition of Rochelle salt in solution at higher temperatures was studied and results obtained differing in some respects from those of earlier workers (Ref 9 and 10). It was occasionally possible to grow crystals at 50-55°C (normally Rochelle salt decomposes at such temperatures). Addition of 2,4-dichlorophenoxy-acetic acid and of glycerin appreciably reduced the rate of crystal growth. Addition of colloidal substances (gelatin,

Card 1/2

SOV/139-58-8-6/29

Homogeneous Growth of Rochelle Salt Crystals in Conditions of Strongly Saturated Solutions and Large Supercooling of the Melt

agar-agar and flax seed extract) was beneficial in inhibiting crack formation and in equalising growth stresses; no evidence was obtained of inclusions of colloidal matter in the crystals. There are 3 figures and 15 references of which 11 are Soviet, 2 German and 2 English.

ASSOCIATION: Rybinskiy Vecherniy Aviatekhnologicheskii Institut (Rybinsk Aero-technological Evening Institute)

SUBMITTED: 23rd April 1958

Card 2/2

ALYAVDIN, N.V.

Homogeneous growth of Seignette salt crystals in highly supersaturated solutions and greatly supercooled melts. *Izv.vys.ucheb.zav.*; *fiz. no.6:44-50 '59.* (MIRA 12:4)

1. Rybinskiy vecherniy aviatekhnologicheskii institut.
(Potassium sodium tartrate) (Crystallization)

ALYAVDIN, N.V.

Controllable brittle fracture of α -salol single crystals. Izv.
vys. ucheb. zav.; fiz. no.1:138-140 '64. (MIRA 17:3)

1. Rybinskiy aviatekhnologicheskij institut.

137-58-6-11820

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 89 (USSR)

AUTHORS: Alyavdin, V.A., Danilov, P.M., Petrikeyev, V.I.

TITLE: Experiences in the Heating of the Shrinkage Head of an Ingot.
Electric Arc Heating (Opyt raboty po obogrevu pribyl'noy
chasti slitka. Elektrodugovoy obogrev)

PERIODICAL: Tr. Nauchno-tekhn. o-va chernoy metallurgii, 1957, Vol
18, pp 102-105

ABSTRACT: Experiments in the electrical heating of the shrinkage heads of 6-t ingots have been run at the Kuznetsk Metallurgical Kombinat (KMK). The first experiments, with St 20 and 45 steels, were run by heating with a single 100-mm electrode. Later, hollow electrodes of 250-280 mm diam were used. The metal was poured into the hot top to only half the usual height. Heating was conducted for 1 hr 40 min. The current was reduced during the period of the heat from 2000 to 800 amps. The voltage was varied in the range from 36 to 48 v. A procedure for electrical heating of 5.8-t ingots of Nr 1Kh18N9T steel was developed. A lined cover with a hole for the electrode was placed over the ceramic hot top. The optimum procedure

Card 1/2

137-58-6-11820

Experiences in the Heating (cont.)

envisaged heating for from 1 hr 30 min to 2 hrs 10 min. The current delivered to the electrode was 500-2000 amps. Energy consumption was 16.7-17.6 kwh/t. In 1956, an installation for simultaneous heating of 6 ingots by electric arc was installed at the KMK. This equipment is provided with three single-phase 190-kva transformers. Each transformer is used to heat two ingots connected in series through their drags. Heating time was 1 hr 50 min. It is noted that the quality of the metal, its chemical composition, macrostructure, and mechanical properties after a trimming of 9-11% were not impaired. The eating away of the ceramic hot top produced an increase in silicon in the slag, and this made for some loss of Ti by oxidation in 1Kh18N9T steel.

V.P.

1. Steel--Production
2. Steel--Heating
3. Electric arcs--Applications

Card 2/2

SAMARIN, A.M.; YEFIMOV, L.M.; VESEIKOV, N.G.; ORMAN, R.Z.; SHABANOV, A.N.;
MORCZENSKIY, L.I.; GRANAT, I.Ya.; TOCHINSKIY, A.S.; ALYAVDIN, V.A.;
DANILOV, P.M.; PETRIKEYEV, V.I.; POPOV, B.N.; BOBKOV, T.M.;
ROSTKOVSKIY, S.Ye.; GAVRISH, D.I.; D'YAKONOV, N.S.; TIMOSHPOL'SKIY,
M.N.; ROMANOV, V.D.; POCHTMAN, A.M.; MELESHKO, A.M.; PODGORETSKIY,
A.A.; OFENGENDEN, A.M.; BRONSHTeyN, V.M.; PRIDANTSEV, M.V.; LIVSHITS,
G.L.; ROZHKOY, V.A.; RUTES, V.S.

Reports (brief annotations). Biul. TSNIICM no.18/19:15-16 '57.
(MIRA 11:4)

1. Chlen-korrespondent AN SSSR (for Samarin). 2. Tsentral'nyy
nauchno-issledovatel'skiy institut chernoy metallurgii (for Rutes,
Rostkovskiy, Pridantsev, Livshits, Rozhkov). 3. Stal'proyekt (for
Shabanov). 4. Kuznetskiy metallurgicheskiy kombinat (for Alvardin,
Danilov, Petrikeyev). 5. Zavod "Elektrostal'" (for Popov).
6. "Dneprospetsstal'" (for Bobkov). 7. Glavopener Ministerstva
chernoy metallurgii SSSR (for Gavrish). 8. Planovoye upravleniye
Ministerstva chernoy metallurgii SSSR (for D'yakonov). 9. Otdel
rabochikh kadrov, truda i zarplaty Ministerstva chernoy metal-
lurgii SSSR (for Timoshpol'skiy). 10. Glavvtorchermet Ministerstva
chernoy metallurgii SSSR (for Romanov). 11. Giprostal' (for
Pochtman). 12. Zavod im. Voroshilova (for Meleshko). 13. Zavod
"Zaporozhstal'" (for Podgoretakiy). 14. Stalinskiy metallurgicheskiy
zavod (for Ofengenden). 15. Nizhne-Tagil'skiy metallurgicheskiy
kombinat (for Bronshteyn).

(Steel--Metallurgy)

ALYAV, D. V. A.

807/148-99-2-4/79

18(5)

AUTHORS:

Leris, A.M., Doctor, Candidate of Technical Sciences, Fedr. L.I.; Glazov, A.M.; Kuznetsov, I.I.; Churnenko, A.D. and Alyav, D.V. Engineer

TITLE:

Metallurgical Refining in Intensified Smelting of Structural Electric Steel: (Metallurgicheskiye metody pri intenzivirovannom plavke konstruktsionnykh elektrostali)

PERIODICAL:

Investitsiya vyzhivsh uchebnykh svedeniya - Chernaya metallurgiya. 1999, Nr. 1, pp 71-81 (USSR)

ABSTRACT:

Comparative tests were carried out on kinetics of harmful impurities with the use of conventional and experimental methods of structural steel smelting. The basic peculiarities of the experimental method, which caused intensification of melting and reduced the melting time by one hour, included: deoxidation during the smelting process; use of gaseous reagents; termination of smelting combined with oxidizing blow-through; reduced quantity of burning-out carbon; preliminary decarburization with silicon-manganese and early treatment of ferroalloy plus coke dust, and ferrochrome; and treatment by slag of the same metal at the moment of discharge. Results

Card 1/3

of the tests were compared and the following conclusions were made: Dephosphorization did not depend on the basicity of the slag and on the temperature, whereas the ferrum oxide content had a strong effect on phosphorus distribution between the metal and the slag; due to metal treatment by slag of the same metal, the decarburization rate in the test method was higher than in the conventional method; a significant effect on the ferrum oxide content was observed in the ladle, where decarburization occurred and therefore slag decarburization prior to the discharge was imperative. The decrease of burning-out carbon did not increase the hydrogen content. Preliminary decarburization and early addition of ferroalloy dust caused speed-up of aliation of oxygen. Prior to the addition of agents with higher reducing capacities than those of carbon, the oxygen content depends on the carbon content and, in the case of "IZKHMZ" steel on the silicon content. Mixing of the metal with the slag caused a decrease of the oxygen content during the discharge. The decarburization of non-metallic elements was more intensive in the test method. It is stated that in spite of the shortened reduction time, intensified decarburization created favorable conditions for eliminating impurities. The

Card 2/3

picture of the metal with the reducing slag had a positive effect on the decrease of non-metallic impurities. The described method ensures the production of high quality metal. The author presents graphs comparing changes of the impurity content in experimental and conventional methods. There are 15 graphs and 1 Soviet reference.

ASSOCIATIONS: Sibirskiy metallurgicheskiy institut (Siberian Institute of Metallurgy). Kuznetskiy metallurgicheskiy kombinat (Kuznetsk Metallurgical Combine)

SUBMITTED: October 25, 1998

Card 3/3

Alyavdin, V.A.

SOV/133-59-4-10/32

AUTHOR: Levin, A.M., Docent, Teder, L.I., Monastyrskiy, V.Ya.,
Glazov, A.N., Alyavdin, V.A., and Chernenko, A.D.,
Engineers

TITLE: Intensification of Smelting Structural Electric Steel
(Intensifikatsiya plavki konstruksionnoy elektrostali)

PERIODICAL: Stal', 1959, Nr 4, pp 323-327 (USSR)

ABSTRACT: An investigation of the possibilities of intensifying the electric smelting process carried out on the Kuznetsk Metallurgical Combine during 1956-1957 is described. For this purpose 100 heats of structural steels were carried out (table 1) in which the following methods of intensification of smelting were tested: 1) the use of oxygen for the oxidation of admixtures; 2) combining of the end of the melting period with the beginning of oxidation; 3) dephosphorisation of metal during melting; 4) decreasing the amount of burned out carbon (up to 0.2%); 5) intensification of the deoxidation by the use of a preliminary precipitation deoxidation with complex deoxidants and with an addition of powdered ferrosilicon after the making of a reducing slag together with powdered coke; tapping of metal

Card 1/3

SOV/133-59-4-10/32

Intensification of Smelting Structural Electric Steel

together with slag with an energetic stirring;
6) intensification of the desulphurisation process;
7) intensification of alloying by starting it at the beginning of the reducing period. The comparison of changes in the composition of metal and slag during smelting by the usual and experimental practices for steel 40Kh is given in Fig 1 and 2 respectively, the comparison of mechanical properties of metal produced by the usual and experimental practices - table 2. Mean duration of the individual smelting periods and whole heats - table 3. It is concluded that the experimental technology of smelting electric structural steels can be used with advantage. The investigation of the metal produced by the experimental technology indicated that it is of satisfactory quality which was confirmed by a considerable decrease in the proportion of out of grade steel (from 0.872 to 0.186%). The mean duration of a heat is decreased by 1 hour which under operating conditions of the melting shop on the work increased the productivity of a furnace by 14% and

Card 2/3

SOV/133-59-4-10/32

Intensification of Smelting Structural Electric Steel

decreases the specific power consumption by 80 kwhr/ton of steel. There are 2 figures, 3 tables and 11 references of which 9 are Soviet, 1 German and 1 American.

ASSOCIATION: Sibirskiy Metallurgicheskiy Institut i Kuznetskiy Metallurgicheskiy Kombinat (Siberian Metallurgical Institute and the Kuznetsk Metallurgical Combine)

Card 3/3

171 171/171
- BOLDYREV, A.K. [deceased]; GREKOVA, M.K.; KUZ'MINA, L.B.; ALYAVDIN, V.F.

Crystallographic tables for finding the ratio of two whole numbers in decimals. Kristallografiia no.4:196-229 '55.

(MLRA 1045)

(Crystallography)

STULOV, N.N.; SHAFRANOVSKIY, I.I.; MOKIYEVSKIY, V.A.; POPOV, G.M.; BELYKH-
TIN, A.G.; NIKOLAYEV, V.A.; ANSHELES, O.M.; GRIGOR'YEV, D.P.;
YKROF'YEV, B.N.; TATARSKIY, V.B.; SOLOV'YEV, S.P.; NIKITIN, V.D.;
RUDENKO, S.A.; DUBININA, V.N.; ALYAVDIN, V.F.; VLADIMIROV, B.N.;
KAZITSYN, Yu.V.; FRANK-KAMENETSKIY, V.A.; KALININ, A.I.; BALA-
SHOVA, M.N.; SAL'DAU, E.P.; DOLIVO-DOBROVOL'SKAYA, G.M.; LAV-
RENT'YEV, M.F.

Viktor Ivanovich Mikheev, Zap. Vses. min. ob-va 86 no.2:317-320
'57. (MIRA 10:6)

(Mikheev, Viktor Ivanovich, 1912-1956)

ALYAVDIN, V.F.

Reference books on mineralogy. Zap. vses. min. ob-va 88 no.5:609-611
'59, (MIRA 13:2)
(Mineralogy)

S/081/62/000/011/012/057
E111/E152

AUTHOR: Alyavdin, V.F.

TITLE: Material on the genetic classification of endogenous tungsten ore bodies of the North-East of the USSR

PERIODICAL: Referativnyy zhurnal, Khimiya, no.11, 1962, 108, abstract 11 G 13. (Byul. Vses. n.-i. geol. in-ta, no.3, 1961, 42-53).

TEXT: The connection has been examined of the endogenous deposits with magmatic complexes and a survey has been made of existing classifications of W-ore bodies. On the territory of the North-East metaltogenetic province, W, together with Au and Sn, is the most characteristic metal of the late mesozoic period of ore formation, and is known in many ore-bodies, some being on a considerable scale. Six types of W-ore bodies are known: 1) pegmatite bodies and lenses; 2) skarn deposits; 3) greisen bodies of the stockwork type; 4) linearly extended zones of greisen (along veins and without visible connection with them); 5) veins and vein-like ore bodies; and

Card 1/2



Material on the genetic ...

S/081/62/000/011/012/057
E111/E152

6) mineralized zones of crushing in sedimentary and igneous rocks. In the proposed genetic classification two ore formations are distinguished: quartz, with wolframite-quartz and scheelite-quartz mineralogical types; and iron-silicate, with wolframite-tourmaline and wolframite-chlorite types. Within the type ranges mineralogical sub-types have been distinguished with respect to a wider paragenesis allowing for the quantitative relations of the minerals.

[Abstractor's note: Complete translation.]

Card 2/2

ALYAVDIN, V.F.

Goniometric determinator of the orthorhombic system of minerals.
Min. sbor. no.15:45-57 '61. (MIRA 15:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiiy
institut, Leningrad.
(Crystallography)

ALYAVDIN, V.F.

Greisens and greisenized rocks of the Alaskite deposit of wolframite.
Trudy VSEGEI 60:159-179 '61. (MIRA 15:3)
(El'ga Valley--Greisen)

ABDULLAYEV, Kh.M.; ALYAVDIN, V.F.; AMIRASLANOV, A.A.; ANIKEYEV, N.P.;
ARAPOV, Yu.A.; BARSANOV, G.P.; BELYAYEVSKIY, N.A.; BOKIY, G.P.;
BORODAYEVSKAYA, M.B.; GOVOROV, I.N.; GOMLEVSKIY, M.N.; SHCHEGLOV, A.D.;
SHAKHOV, F.N.; SHILO, N.A.; YARMOLYUK, V.A.; DRABKIN, I.Ye.;
YEROFEYEV, B.N.; YERSHCV, A.D.; IVANKIN, P.F.; ITSIKSON, M.I.;
KARPOVA, Ye.D.; KASHIN, S.A.; KASHKAY, M.A.; KORZHINSKIY, D.S.;
KOSOV, B.M.; KOTLYAR, V.N.; KREYTER, V.M.; KUZNETSOV, V.A.; LUGOV,
S.F.; MAGAK'YAN, I.G.; MATÉRIKOV, M.P.; OMI NTSOV, M.M.; PAVLOV, Ye.S.;
SATPAYEV, K.I.; SMIRNOV, V.I.; SOBOLEV, V.S.; SOKOLOV, G.A.; STRAKHOV,
N.M.; TATARINOV, I.M.; KHRUSHCHOV, N.A.; TSAREGRADSKIY, V.A.;
CHUKHROV, F.V.

In memory of Oleg Dmitrievich Levitskii; obituary. Sov.geol. 4
no.5:156-158 My '61. (MIRA 14:6)
(Levitskii, Oleg Dmitrievich, 1909-1961)

ALYAVDIN, V.F.; ALYAVDINA, Ye.S.

Alkaline feldspars of igneous rocks and hydrothermal veins
of the Chagydan deposit (Kolyma Basin). Zap. Vses. min.ob-va
90 no.2:193-206 '61. (MIRA 14:9)
(Kolyma Valley--Feldspar)

ALYAVDIN, V.P.; VASIL'YEVA, L.P.; VITOSHINSKAYA, M.I.; ORIOOR'YEVA, L.N.;
GODLEVSKIY, M.N.; ZHERBINA, K.M.; ZHEZEKOVA, V.H.; KISELEVA, A.N.;
KOZYREVA, Yu.A.; KULIKOV, M.V.; PAFENGOL'TS, K.N.; POLEVOY, B.P.;
SOLOV'YEV, S.P.; STULOV, N.N.; SHAFRANOVSKIY, I.I.

In memory of A.V.Nemilovoi. Zap.Vses.min.ob-va 90 no.6:756-757
'61. (MIRA 15:2)

(Nemilova, Aleksandra Vasil'evna, 1892-1961)

~~ALYAVDIN, Vladimir Fedorovich; SIVYRYAYEV, Yu.T., red. izd-va; BYKOVA,
V.V., tekhn. red.~~

[Lead and zinc, how to search for them in the field] Svinets i
tsink, kak ikh iskat' v prirode. Izd.2., ispr. Moskva, Gos-
geoltekhizdat, 1962. 38 p. (MIRA 15:11)
(Lead ores) (Zinc ores)

ALYAVDIN, V.F.

Mineralogical studies of the Chagydan tungsten deposit.
Zap.Vses.min.ob-va 92 no.2:158-174 '62. (MIRA 15:6)
(Nizhniy Seimohan region--Mineralogy)

UNKSOV, V.A.; BORVIKOV, P.P.; RUNDKVIST, D.V.; PAVLOVA, I.G.;
ALYAVDIN, V.F.; VOLOSTNYKH, G.T.; ROZINOV, M.I.; SHCHEGLOV, A.D.;
IVANOVA, A.A.; KORMILITSYN, V.S.; SHCHEGLOV, A.D.; ARTEMOV, V.R.;
RYTSK, Yu.Ye.; GINZBURG, A.I.; DORTMAN, N.B.; TOPORETS, S.A.;
TRUNINA, V.Ya.; YAKOVLEV, I.K.; BOGDANOVA, L.A.; SARBEEVA, L.M.

Problems of the geology and characteristics of the distribution
of mineral deposits. [Trudy] VSEGEI 92:53-89 '63. (MIRA 17:4)

ALYAVDIN, V.F.

Alaskite massif of porphyrylike granite in the upper
Indigirka Valley. Trudy VSEGEI 98:32-52 '63.

(MIRA 17:5)

ALYAVDIN, V.F.; BONSHTEDT-KUPLETSKAYA, E.M.; GODLEVSKIY, M.N., doktor geol.-
mineral.nauk; KOMKOV, A.I.; KUKHARENKO A.A., prof.; SAL'DAU, E.P.;
SMOL'YANINOVA, N.N.; BORNEMAN-STARYNKEVICH, I.D.; TATARSKIY, V.B.,
prof.; FRANK-KAMENETSKIY, V.A.

From the Commission on New Minerals of the Mineralogical
Society of the U.S.S.R. Zap.Vses.min.ob-va 94 no.5:555-
565 '65. (MIRA 18:11)

1. Komissiya po novym mineralam Vsesoyuznogo mineralogicheskogo
obshchestva. 2. Predsedatel' Komissii po novym mineralam
Vsesoyuznogo mineralogicheskogo obshchestva (for Frank-
Kamenetskiy). 3. Zamestitel' predsedatelya Komissii po novym
mineralam Vsesoyuznogo mineralogicheskogo obshchestva (for
Bonshtedt-Kupletskaya). 4. Sekretar' Komissii po novym
mineralam Vsesoyuznogo mineralogicheskogo obshchestva (for
Sal'dau).

SK
ALYAVDIN, V.N.

PROCESSES AND PROPERTIES OF IT
Decay of luminescence in certain classes of luminescent substances (Al₂O₃, Cr, CdI₂, MnCl₂, Zn, SiO₂, Mn). V. N. Alyavdin, E. V. Fedorov and V. L. Leyshin. *Compt. rend. acad. sci. U. R. S. S.* 25, 100-101 (1939) (in English). Expts. were carried out with the purpose of detg. the course of luminescence decay in substances as yet not investigated. Chromium aluminates showed the process to be unimol., the course of decay being rigorously ex-

ponential, the mean duration of luminescence (τ) = 0.010 sec. The lamellar phosphors obtained from CdI₂ and MnCl₂ gave a broad continuous band (640-720 m μ). Heating was found to affect the yield of lum. - concn. which was 1.00, 0.89, 0.72 and 0.62 at 20, 62, 92 and 131 $^{\circ}$ resp. The decay curve was found to obey the exponential law and (τ) was found independent of the MnCl₂ content. The decay process in the villemites was found to be more complex, and is believed to consist of at least 2 processes: a short exponential process with a mean duration of the order of 0.01 sec., and a prolonged hyperbolic process with an index of decay $n \approx 2$. Preliminary expts. show that a rise in temp. reduces the value of n in the case of the lengthy process and in certain cases materially enhances the intensity of luminescence. Frank Connet

INTERNATIONAL LITERATURE CLASSIFICATION

ALYAVDIN, V. N.

"A Study of Decay of Certain Classes of Luminescent Substances," Iz. Zh Ak. Nauk SSSR, Ser. Fiz., Vol. 4, No. 1, 1940.

The P. N. Lebedev Physical Institute of the Academy of Sciences of the USSR,
Moscow.

28

PROCESS AND PROPERTIES INDEX

Grinding [of portland-cement clinker] in tube mills.
 V. V. Alyavdin, *Geinerts. Vsesoyuz. Inst. Proektirovaniya Prod. i Nauch.-Issledovatel. Rabotam Tsiment. Prom. "Giprotsement"* No. 29, 23-30 (1938).--During grinding in ball mills the percentage of residues on the control sieves diminishes with duration of grinding and accordance with: $\log y = \log A - kt^m$, where A is the percentage of residue at the beginning of grinding and y the percentage of residue after time t ; k and m are constants depending on the conditions of grinding. The results obtained agree with those obtained experimentally. As the grinding process in each chamber of a multi-chamber tube mill is essentially the same as the grinding process in each chamber of the closed ball mill, the same relation exists for the residues in each chamber. The output of the mill, the expenditure of energy, and the fineness of grinding are thus related: $\log y = \log A - k_2/L^m$ and $\log y = \log A - k_3 \cdot W$, where A and y are as above percentage, L is the mill output, W the energy required per metric ton of ground material, and k and m are constants as before. A series of expressions is derived from which the most suitable conditions of mill working can be detd. A relation exists between the granulometric compn. (G) of the ground material and the conditions of grinding. An impression has been obtained relating G with the particle diam. and duration of grinding.
 B. C. P. A.

ASB-514 METALLURGICAL LITERATURE CLASSIFICATION

FROM SYDISHAN

FROM BOWLING

FROM SYDISHAN

FROM BOWLING

PROCESSES AND PROPERTIES INDEX

24

Selection of the charges of tube mills (for portland cement clinker). V. V. Alyavlin. *Gosudarst. Ispytaniya. Ind. Proektirovaniya Prib. i Nauch.-Issledovatel. Rabotam Izvest. Prom. "Giprotsement"* No. 23, 101-34 (1933).—An account is given of grinding tests of portland cement clinker, using the method of "periodic charges" (cf. Mittag, C. A. 31, 3340), the purpose of which was to det. (1) the most suitable charge of grinding media, (2) the influence of the diam. and selection of the grinding media on the grinding process, and (3) the most suitable ratio of quantity of grinding media to vol. of ground material simultaneously present in the mill. The results and the value of the method used are considered in detail. General consideration is given to the method of investigating the working of grinding mills, including the evaluation of the output, the development and analysis of grinding diagrams, and grinding tests with differing charges of grinding media. B. C. P. A.

ASB-55A METALLURGICAL LITERATURE CLASSIFICATION

FROM SYMBLUM

22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

ALYAVDINA, A. A.

"Anatomical Structure of the Bag-Like Fruit of Crypsis Schoenoides Lam. in
Relation to the Problem of Boundary Between Pericarp and Seed-Coat in Cereal
Kernels." Dok. An. Vol. 33, No. 4, 1941.

Mbr., Dept. Botany, Agricultural Inst., Chkalov, RSFSR,

ALYAVDINA, K.P., assistant

Studies on corn diseases in Ivanovo Province. Sbor.nauch.trud.
Ivan. sel'khoz.inst. no.16:62-68 '58. (MIRA 13:11)

1. Kafedra botaniki i selektsii Ivanovskogo sel'skokhozyaystvennogo
instituta.

(Ivanovo Province--Corn (Maize)--Diseases and pests)

12

CA

ALYAVDINA, L. A.

Purifying papaverine. L. A. Alyavdina. Russ. 39,100, Oct. 31, 1934. The papaverine is crystal. In the usual manner from alc., converted into its hydrochloride by the action of an alc. soln. of HCl and the salt recrystd. The product is washed with alc. in the usual manner, decanted and dried.

ADD LIA METALLURGICAL LITERATURE CLASSIFICATION

ALYAVDJINA, L. M.
CA

7

Bimetal for the construction of oil reservoirs. L. A. Alyavdjina (L. M. Gubkin Moscow Oil Inst., Moscow). *Trudy Nauch. Neftyan. Inst. im. J. M. Gubkina* 1940. 242-7. - Lab. corrosion-resistance tests were made with 25 x 70-mm. plates of ordinary and stainless steels under conditions approximating storage of Ishimbayev oil contg. 2.41% S. Ordinary steel ST2 corrodes most intensively in the gas phase of the oil, the loss being 0.25-0.80 mm. per year at 15° and 0.25-1.06 mm. at 15-50°. The stainless steels KVa1, KVa1T, KVaZS, and KZh2 are completely resistant in the gas phase at 15° and at 15-50°. Stainless steel KVa1 without a surface scale is completely resistant in the gas and liquid phases, in the drill water, and at the boundaries of oil-gas and oil-water. This steel is satisfactory for protecting oil reservoirs against corrosion by using it as a 0.2-0.3-mm. layer on steel ST2. Corrosion curves of steels are given. B. Z. K.

AUTHORS: Topchiyev, A. V., Member, Academy of Sciences 20-119-3-32/65
USSR, Alyavdina, L. A.

TITLE: Polymerization of Isobutylene in the Presence of Boron
Fluoride on Activated Charcoal (Polymerizatsiya izobutilena
v prisutstvii fluoristogo bora na aktivirovannom ugle)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 3,
pp. 511-514 (USSR)

ABSTRACT: Almost 80 years ago (ref 1) it was communicated that a
polymer develops from propylene under the action of boron
fluoride. In the present paper the influence of temperature,
of the passage velocity, of the carrier, and the charging
time of the catalyst on the fraction composition and the
conversion of isobutylene were investigated under the
conditions mentioned in the title. The polymerization was
carried out in the gaseous phase under atmospheric pressure.
Furthermore the conditions of application and the cause for
the catalytic effect of new molecular compounds
 $K_2SO_4 \cdot BF_3$ and $Na_2SO_4 \cdot BF_3$ (ref 2) in the case of the same
reaction were investigated (ref 3) which hitherto has not

Card 1/4

Polymerization of Isobutylene in the Presence of Boron Fluoride on Activated Charcoal 20-119-3-32/65

been done. Production conditions of isobutylene and of the catalyst are described as well as the reaction chamber. The polymerization was carried out at 20, 70, 100 and 150° with a passage velocity of 6, 12, 18 and 30 l/hour. As figure 1, I shows the content of the fraction 99-126°C increases to 33 % in the polymer at a passage velocity of 60 l/hour, whereas the quantity of the fraction > 185°C decreases to 12 %. The conversion of isobutylene remains at 99-98 % almost the same. As figure 1, II shows the conversion is reduced to 50 %, the content of the rest > 185° decreasing to 7.5 % with rising temperature in the case of a velocity of 30 l/hour, whereas the quantity of the fraction 98-126°C rises up to 48 %. Figure 2 shows the alteration of the values d_4^{20} and n_D^{20} of the polymer in dependence on the two last mentioned velocities. In either case the specific weight and the refraction index are reduced with rising temperature. At equal temperature these values are lower for the higher velocity. Thus was proved that the polymerization degree of isobutylene is reduced by the

Card 2/4

Polymerization of Isobutylene in the Presence of Boron Fluoride on Activated Charcoal 20-119-3-32/65

temperature rise, a rise of the passage velocity, or by the reduction of the duration of contact. Table 1 shows physical and chemical properties of the polymers obtained at 150°C and some of their fractions. The production method of the molecular compounds mentioned at the beginning is described. Since it was proved by numerous experiments that their catalytic effect is caused by boron fluoride, these compounds were investigated with a simultaneous supply of boron fluoride at 150°C. The reaction conditions are described. The composition of the molecular compounds was effected by a slow temperature rise of from 360 to 390°C. The obtained polymer was washed, dried, and fractionated. The results are given in table 1. Thus for the first time the possibility of an application of the new molecular compounds $K_2SO_4 \cdot BF_3$ and $Na_2SO_4 \cdot BF_3$ in the reaction of the polymerization of isobutylene was proved and the nature of the catalytic effect was explained (ref 3). In the case of increased temperature the molecular compound is decomposed, and the separated boron fluoride acts as

Card 3/4

Polymerization of Isobutylene in the Presence of Boron Fluoride on Activated Charcoal 20-119-3-32/65

catalyst of the reaction. The duration of the effect of the catalyst was studied furthermore table 2 gives the results of the optical analysis of several fractions of the polymer. From this also the isomerization which takes place can be seen. Experiments with and without carrier (activated charcoal) showed that the conversion of isobutylene without carrier decreased with advancing time and in the end of the experiments amounted to only 18,7 %. With carrier the conversion increased gradually up to 96 %. Thus the use of activated charcoal is expedient. There are 3 figures, 2 tables, and 4 references, 3 of which are Soviet

SUBMITTED: July 2, 1957

AVAILABLE: Library of Congress

Card 4/4

ALYAVDINA, L. A.

AUTHORS: Topchiyev, A. V., Member, Academy of Sciences, USSR, Alyavdina, L. A. 20-119-4-25/60

TITLE: Polymerization of Isobutylene on the Action of Boron Fluoride Adsorbed by Silica Gel (Polimerizatsiya izobutilena pri deystvii ftoristogo bora, adsorbirovannogo na silikagele)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 4, pp. 720-723 (USSR)

ABSTRACT: The authors realized earlier the above mentioned reaction (reference 1) and obtained low-molecular polymers of isobutylene (di- and tri-isobutylenes). In the present paper the dependence of the isobutylene conversion and the fractional composition of the polymer on the volumetric rate, the temperature, the duration of the action of the catalysts as well as on the boron fluoride quantity adsorbed by the silica gel was, investigated. The experiments were carried out at 20, 70, 100 and 150° and a supply velocity of isobutylene of 6 and 30 l/hour under atmospheric pressure. The

Card 1/4

Polymerisation of Isobutylene on the Action of Boron Fluoride Adsorbed by Silica Gel 20-119-4-25/60

production methods of the two reaction participants are given, the reactor and the silica gel (type ShKS) were described together with the reaction conditions. The obtained polymer was subjected to fractional distillation. Figure 1 shows that the isobutylene conversion decreases from 97 to 65% at a volumetric rate of 60 hours⁻¹. Apparently the silica gel surface fixes the boron fluoride less at 150° than at 20, 70 and 100° (figure 1). The amount of fraction >185° decreases with rising temperatures from 52 to 8%, whereas the fraction 98 - 126° increases and reaches 37%. Thus at a higher temperature a lighter polymer is produced which is confirmed by table 1, too, which gives the physical constants of the polymers. Figure 2 shows the curves of the fractional distillation of two polymers. Hence follows that with an increase of the boron fluoride quantity at the silica gel the polymerization process is less thorough. Figure 3 shows that the polymer which was produced at a volumetric rate of 300 hours⁻¹ contains by 11% more fraction 98 - 126°, by 9% less fraction

Card 2/4

Polymerization of Isobutylene on the Action of Boron Fluoride Adsorbed by Silica Gel 20-119-4-25/60

170 - 185°, and by 5% less fraction $>185^\circ$, compared to the polymer which was produced at a volume velocity of 60 hours⁻¹. Hence follows that with increasing volume velocity or by shortening the period of contact with the boron fluoride the polymerization degree of isobutylene will decrease. Table 2 shows results of the spectral analysis of some polymer fractions. Hence follows that the polymerization is accompanied by an isomerization in the case of which 3 different trimethylpentenes are produced. Figure 4 shows a very high isobutylene conversion (98 - 90%) toward the end of the experiment. Finally it was found that the boron fluoride catalyst remains for a longer time active in silica gel and operates effectively at 100°. It is able to work for 158,3 hours without regeneration. There are 4 figures, 2 tables, and 4 references, 3 of which are Soviet.

Card 3/4

AUTHORS: Topchiyev, A. V., Member, Academy of Sciences, AS USSR, Alyavdina, L. A.

20-119-0-42/35

TITLE: The Polymerization of Isobutylene Under the Influence of Boron Fluoride Upon Aluminum Oxide (Polimerizatsiya izobutilena pod vliyaniyem fluoristogo bers na oksid alyuminiya)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 139, No. 5, pp. 957-960 (USSR)

ABSTRACT: In this paper the above-mentioned process is investigated according to temperature, the volume velocity, the method and the duration of application of the catalyst. The method of production of the particulates in the reactor are described. Boron fluoride was produced according to the method described earlier (ref 6). The velocities of volume obtained were 60 and 300 liters / hr, at 20, 40, 60 and 80°C. The following were the results of the conversion of isobutylene at 4 years: 1) at 20°C and 60 liters / hr and at the above-mentioned temperatures and 2) at 44-48°C and 300 liters / hr. At 20°C and 60 liters / hr the yield of the > 1000-1100 g/l product was from 51 to 43% that of the reaction 100-1100 g/l.

Case 143

The Polymerization of Isobutylene Under the Influence of Hydrogen Fluoride Upon Aluminum Oxide

at 10-27%, whereas the fraction 96-126°C increases from 5.2 to 25.5%. Thus the degree of polymerization of isobutylene decreases with increasing temperature, which also follows from table 1. In table 1 the investigated results of two polymers are given when the reaction is carried out at 150°C and at the two velocities of volume (without addition of BF_3). As the polymer in the latter experiment is heated the polymerization with a prolongation of the duration of contact with BF_3 and with a reduction of the velocity of volume takes place more thoroughly. At 150°C, but with the addition of BF_3 (as $H_2SO_4 \cdot BF_3$), 3 polymers were obtained by fractional distillation (figure 2). From the results follows that in the case of such a supply of HF the degree of polymerization of isobutylene decreases. The presence of 6-12% of the fraction 92-100°C in all polymers is explained by the destructive influence of the carrier of aluminum oxide. The catalyst remains active for a longer period of time and effectively works at 150°C without regeneration. The resulting polymer of isobutylene can be used as...

Page 2/3

ALYAVDIN, V.F.; ALYAVDINA, Ye.S.

Alkaline feldspars of igneous rocks and hydrothermal veins
of the Chagydan deposit (Kolyma Basin). Zap. Vses. min.ob-ya
90 no.2:193-206 '61. (MIRA 14:9)
(Kolyma Valley---Feldspar)

1. ALYAVI, L. A.
2. USSR (600)
4. Stomach-Diseases
7. Gastric diseases in Ibn-Sina's (Avicenna's) works.
Klin. med. 30 No. 9, 1952

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

ALYAVI, L., Cand Med Sci -- (diss) "On gastro-intestinal diseases in the works of Ibi Sinu." Tashkent, 1957, 23 pp (Tashkent State Medical Institute), 200 copies (KL, 36-57, 107)

type $CdX_2An.HX$, where X is Br or I, are formed, when an equimolar amount of HX is added; and the complexes of the type $CdX_2An.2HX$ are formed, when excessive HX is added. The solubility of the complexes in water decreases in the series Br \rightarrow I. The values of the molar electrical conductivity show that the complexes of the type $CdX_2An.HX$ dissociate into 3 ions, and the complexes of the type $CdX_2An.2HX$ dissociate into 5 ions

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101210019-6"

ALYAVI, M.K.; AZIZOV, M.A.

Reactions between α, β -bipyridine and cadmium halides, Dokl. AN Uz.
SSR no.4:37-41 '58. (MIRA 11:6)

1. Tashkentский gosudarstvennyy meditsinskiy institut i Tashkentский
farmatsevticheskiy institut. Predstavleno akademikom AN UzSSR A.S.
Sadykovym.

(Bipyridine) (Cadmium halides)

ALYAVI, M.K.

Reaction of 1,2'-bipiperidine with cadmium halides. Dok.
AN Uz.SSR no.10:35-39 '58. (MIRA 11:12)

1. Tashkentskiy gosudarstvennyy meditsinskiy institut. Predstavleno
akademikom AN UzSSR A.S.Sadykovym.
(Cadmium halides) (Bipiperidine)

ALYAVI, R.A.

Effect of denervation of uterine vessels on the structure of the
uterus. Dokl. AN Uz. SSR no.4:73-76 '58. (MIRA 11:6)

1. Tashkentskiy gosudarstvennyy meditsinskiy institut. Predstavleno
akademikom AN UzSSR A. Yu. Yunusovym.
(UTERUS--INNERVATION)

ALYAVIYA, M. K. Cand Chem Sci -- (dis) "Complex compounds of cadmium
halides with anabasino, alpha, beta-dipyridyl and alpha, ^(beta)dipyperidyl."
(^{Uzbek. House of Acad Sci USSR})
Tashkent, 1958. 19 pp (Acad Sci USSR. Inst of General and Inorganic
Chemistry im N. S. Kurnakov), 175 copies (KL, 52-58, 99)

ALYAVIYA, M.K.; ZAYTSEV, L.M.

Synthesis and thermographic analysis of complex compounds of
cadmium halides with anabasine. Zhur. neorg. khim. 6 no.7:
1599-1603 J1 '61. (MIRA 14:7)
(Cadmium compounds) (Anabasine)

ALYAVIYA, M.K.

Physiochemical properties of complex compounds of cadmium
halides with anabasine. Zhur. neorg. khim. 6 no.7:1604-
1611 J1 '61. (MIRA 14:7)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.
Kurnakova Akademii nauk SSSR i Tashkentskiy gosudarstvennyy
meditsinskiy institut.
(Cadmium compounds) (Anabasine)

ALYAVIYA, M.K.; NARMETOV, K.N.

Reaction of cadmium halides with nicotinic acid. Zhur.neorg.khim.
8 no.5:1176-1179 My '63. (MIRA 16:5)

1. Tashkentskiy gosudarstvennyy meditsinskiy institut.
(Cadmium halides) (Nicotinic acid)

ALYAVIYA, M.K.

Complex of cadmium halides with α, β -dipyridyl and α, β -dipiperidyl.
Zhurkneorg.khim. 8 no.5:1180-1186 My '63. (MIRA 16:5)
(Cadmium halides) (Bipyridine)